## **CLAIMS**

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- 1. Keyboard means comprising a group of keys arranged about a centre in an array extending in two mutually transverse directions and adapted to be operable by a single finger in one or more of the following manners:
- (a) so that a single finger with a playing area of maximum diameter 1.5 cm can reach and operate a plurality of at least three of said keys singly or in combinations of two or more thereof without moving the finger more than a maximum distance of 0.5 cm;
- (b) so that a single finger with a playing area of maximum diameter 1.5 cm can operate a plurality of at least three of said keys together.
  - 2. Means as claimed in claim 1, in which each said maximum diameter is 1 cm.
- 3. Means as claimed in claim 1 or 2, in which said maximum distance is 0.3 cm.
  - 4. Means as claimed in any one of claims 1 to 3, in which each said plurality is at least four.
  - 5. A keyboard unit comprising a plurality of keys surrounding a centre and operable singly and chordally by a single finger (which term includes a thumb).
  - 6. A unit as claimed in claim 5, in which the keys are connected to operate by a single touch selectively the seven major notes of an octave of the musical scale.
  - 7. A unit as claimed in claim 5 or 6, in which the keys are connected to operate by a single touch selectively the twelve semitone notes of an octave of the musical scale.
  - 8. A unit as claimed in claim 6 or 7, in which at least six of said seven notes or, as the case may be, at least eleven of said twelve notes are operable in order going around the centre.
    - 9. A unit as claimed in any preceding claim, consisting of three keys surrounding a centre.
  - 10. A unit as claimed in claim 9, in which in order around the centre, the first, second and third keys are connected to operate respectively doh, me, soh of the tonic sol-fah scale, and the first and second keys and the successive other chordal pairs to operate respectively re, fah, lah.
  - 11. A unit as claimed in claim 9 or 10, in which there is no key at the centre and the three surrounding keys are operable chordally together to operate te.
    - 12. A unit as claimed in claim 9 or 10, in which there is a centre key operable to operate te.
  - 13. A unit as claimed in claim 12, in which chordal operation of a surrounding key, or an adjacent chordal pair thereof, together with the centre key operates a note a semitone higher than without the centre key.
    - 14. A unit as claimed in any one of claims 5 to 9, consisting of four keys surrounding a centre.
  - 15. A unit as claimed in claim 14, in which in order around the centre the first, second, third and fourth keys are connected to operate doh, me, soh, te.
  - 16. A unit as claimed in claim 14, in which, in order around the centre, the first, second, third and fourth keys are connected to operate doh, me, soh, lah.
  - 17. A unit as claimed in claim 16, in which the keys are connected for chordal operation of the three keys opposite the lah key and the doh key to operate a note a semitone above lah and doh respectively, and the three keys opposite the me key and the soh key to operate a note a semitone below me and soh respectively.

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- 18. A unit as claimed in claim 17, in which the keys are connected for chordal operation of the soh and lah keys together to operate a note a semitone above soh.
  - 19. A unit as claimed in claim 5, in which there is a centre key.
- 20. A unit as claimed in claim 19, when appendant to any one of claims 11 to 14, in which the centre key is operable to operate te.
- 21. A unit as claimed in claim 19 when appendant to any one of claims 11 to 14, in which the centre key is operable to operate fah.
- 22. A unit as claimed in any one of claims 15 or 18 or 20 or 20, arranged for chordal operation of a surrounding key, or an adjacent chordal pair of surrounding keys, together with the centre key to operate a note a semitone higher than without the centre key.
- 23. A unit as claimed in any one of claims 15 or 18 or 20 or 21, arranged for chordal operation of a surrounding key, or an adjacent chordal pair of surrounding keys, together with the centre key to operate a note a semitone lower than without the centre key.
- 24. A unit as claimed in any one of claims 15 or 18 or 20 or 21, arranged for chordal operation of a surrounding lah, doh, me or soh key together with the centre key to operate respectively the semitones above lah and doh and the semitones below me and soh.
  - 25. A unit as claimed in any one of claims 5 to 8, consisting of seven keys surrounding a centre.
- 26. A unit as claimed in claim 25, in which there is a centre chordally operable with a surrounding key, or an adjacent chordal thereof, to provide a shift function.
- 27. A unit as claimed in claim 5, comprising a centre key, the keys being connected for chordal operation of the centre key together with any one or more of the surrounding keys to operate a note a whole number of octaves above (or below) the same without the centre key.
- 28. A keyboard unit comprising a plurality of keys adapted for operation by a single finger and substantially according to any embodiment hereinbefore described.
- 29. A keyboard comprising a plurality of spaced apart said means and/or units, each as claimed in any preceding claim.
- 30. A keyboard as claimed in claim 29, comprising a group of said means and/or units arranged to be operable by one and the same finger.
- 31. A keyboard as claimed in claim 30, comprising a plurality of said groups arranged to be operable by respective fingers.
  - 32. A keyboard as claimed in claim 31, in which the means and/or units of a said group operable by one finger are connected to select one instrumental sound and those of another said group operable by another finger are connected to select a different instrumental sound.
  - 33. A keyboard as claimed in claim 31, in which one said means and/or unit in each said finger group is connected to be operable to select a first instrumental sound and another said unit in each of the same groups is connected to be operable to select a second instrumental sound.

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- 34. A keyboard as claimed in any one of claims 31 to 33, in which the said means and/or units of each said finger group are arranged in a column and the columns are approximately parallel to facilitate simultaneous playing operation of some or all of the groups by a single hand.
- 35. A keyboard as claimed in claim 29, in which the said means and/or units are arranged in positions corresponding to the keys on a piano.
  - 36. A keyboard substantially according to any example hereinbefore described.
  - 37. A musical instrument comprising a keyboard according to any one of claims 29 to 36.
- 38. A guitar comprising a keyboard as claimed in claim 29, in which the said means and/or units are spaced along the back of the guitar neck for operation by the thumb of a hand that does the guitar fingering.
- 39. A means, unit or keyboard as claimed in any one of claims 1 to 38, connected to operate alphanumeric characters selectively.
  - 40. A keyboard as claimed in claim 39 when appendant to claim 31, connected for said groups to be operable simultaneously by respective fingers to operate a selected ordered set of alphanumeric characters.
    - 41. A means, unit or keyboard as claimed in any one of claims 1 to 40, connected to operate lights selectively.
    - 42. A means, unit or keyboard as claimed in any one of claims 1 to 41, comprising a QWERTY keyboard.
    - 43. A means, unit or keyboard as claimed in any one of claims 1 to 42, comprising a mosaic keyboard.
  - 44. Keyboard means as claimed in any one of claims 1 to 4, comprising a unit, keyboard or musical instrument as claimed in any one of claims 5 to 43.